OIPE

RAW SEQUENCE LISTING

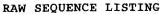
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DATE: 01/11/2002 TIME: 11:52:36

PATENT APPLICATION: US/09/903,410

Input Set : A:\DIVER1180-2.ST25.txt
Output Set: N:\CRF3\01112002\I903410.raw

		APPLICANT: DIVERSA CORPORATION	CAITEDED
3	٩, .,	ROBERTSON, Dan	ENTERED
4		MURPHY, Dennis	
5		REID, John	
6		MAFFIA, Anthony	
7		LINK, Steven	
8		SWANSON, Ronald	
9		WARREN, Patrick	
10	-1.00	KOSMOTKA, Anna	
		TITLE OF INVENTION: ENZYMES HAVING ESTERASE ACTIVITY	AND METHODS OF USE THEREOF
		FILE REFERENCE: DIVER1180-2	
		CURRENT APPLICATION NUMBER: US 09/903,410 CURRENT FILING DATE: 2001-07-10	
		PRIOR APPLICATION NUMBER: US 09/382,242 PRIOR FILING DATE: 1999-08-24	
		PRIOR APPLICATION NUMBER: US 08/602,359	
		PRIOR FILING DATE: 1996-02-16	
		NUMBER OF SEQ ID NOS: 42	
		SOFTWARE: PatentIn version 3.0	
		SEQ ID NO: 1	
		LENGTH: 52	
		TYPE: DNA	
		ORGANISM: Artificial sequence	
		FEATURE:	
		OTHER INFORMATION: Primer for PCR	
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44	<213>	ORGANISM: Artificial sequence	
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47	<223>	OTHER INFORMATION: Primer for PCR	
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		FEATURE:	•
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		LENGTH: 31	
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08	<213>	ORGANISM: Artificial sequence	



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Input Set : A:\DIVER1180-2.ST25.txt
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70 <220> FEATURE:	
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139 <212> TYPE: DNA	

142 <220> FEATURE:

140 <213> ORGANISM: Artificial sequence

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Input Set : A:\DIVER1180-2.ST25.txt
Output Set: N:\CRF3\01112002\1903410.raw

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	<212> TYPE: DNA	
	<213> ORGANISM: Artificial sequence	
	<220> FEATURE:	
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	THE THE CHARTEON, FILINGI TOL PUR	

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Input Set : A:\DIVER1180-2.ST25.txt
Output Set: N:\CRF3\01112002\I903410.raw

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	<pre>&lt;220   FEATORE. &lt;223&gt; OTHER INFORMATION: Primer for PCR</pre>	
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	<210> SEQ ID NO: 18	72
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Input Set : A:\DIVER1180-2.ST25.txt
Output Set: N:\CRF3\01112002\I903410.raw

290	cataaaatac tattttaaat	tccatggagg	С			31
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	<213> ORGANISM: Staphy	lothermus M	farinus			
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301	ccattaacaa tgatcgcatt	agctatctct	atgtcgtcat	ggtttaatat	atggaataat	120
303	gcattaagcg atctaggaca	toctottaaa	agcagtgttg	ctccaatatt	caatctaggt	180
305	cttgcaattg gtgggatact	aattqttata	gttggtttaa	gaaatcttta	ttcgtggagt	240
307	agagttaaag gatctttaat	catatccatq	ggtgtatttc	ttaacttaat	aggggttttc	300
309	gacgaagtat atggttggat	acatttccta	gtctcagtat	tgtttttctt	atcaataata	360
311	gcatatttca tagctatatc	aatacttgac	aaatcatgga	tagctgttct	actaataata	420
313	ggtcatattg caatgtggta	tctacacttt	gcttcagaga	ttccgagagg	tgcggctatt	480
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	<210> SEQ ID NO: 24					
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	<212> TYPE: DNA					
	<213> ORGANISM: Pyrodi	ictium				
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328	tttgcatttt actggtttct	gaccatatat	acqtqqttac	ccggtgtcct	agtccggggc	120
330	gtagctgtgg acacaggggt	gactcagata	cctgggctcg	gccggcgcgg	taagaggctg	180
332	ctcctggccg ctgtggctgt	cttagcactt	attatatcca	ttattatccc	ggcttatgtg	240
331	gcgtatagta gtctgcaccc	ggagagetgt	caacccatta	caccadadad	gctcacctac	300
336	aaagagttca gcgtgaccgc	ggaggatggc	ttaataattc	qqqqctqqqt	getgggeece	360
338	ggcgctgggg gcaacccggt	attcatttta	atgcacgggt	atactgggtg	ccgctcggcg	420
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346	gtggggttca gtatgggcgg	cactatagea	atcqtqqaqq	gtgctgggga	cccgcgggtc	660
348	tacgcggtgg ctgctgatag	cccqtactat	aggeteeggg	acgtcatacc	ccggtggctg	720
350	gagtacaaga cgccgctgcc	agactagata	gatatactag	ccgggttcta	cgggaggctg	780
352	atggcgggcg ttgacctcgg	ct.t.cggcccc	actagagatag	agcgcgtgga	taagccgttg	840
354	ctggtggtgt atgggccccg	ggacccgctg	gtgacgcggg	acqaqqcqag	gageetggeg	900
356	tecegtagee egtgtggeeg	tctcgtcgag	gttcctgggg	ctggccacgt	ggaggccgtg	960
358	gatgtgctcg ggccgggccg	ctacgcagac	atgctgatag	agctggcgca	cgaggagtgc	1020
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	<211> LENGTH: 789					
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	5 <213> ORGANISM: Archaeoglobus veneficus					
	<400> SEQUENCE: 25	<b>,</b>				
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371	ccaccaattg tctttgttca	cggatggaca	qcaaatatqa	atttttggaa	agagcaaaga	120
373	cgttattttg caggcaggaa	tatgatgttg	tttqtcqata	acagaggtca	tggcaggtcc	180
375	gataagccac ttggatacga	tttctacaga	tttgagaact	tcatttcaga	tttagatgcg	240
377	gttgttaggg agactggagt	ggagaaattt	gttctcgtcg	gacattcatt	cggaacaatg	300
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